

Work Order ID 143892

March 28, 2016 10:28:06 AM

143892

Page 1

Item ID: D412-711-021

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Vertical Reference Door Modification LH

Start Date: 4/11/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 4/18/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: SLA **20160328**

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D412-711	K								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefiles and create labels per PPP D412-711-021 CHG002								
120	Pick Kit	0.00							
120	Purchasing								
Packaging	Memo	0.00							
Packaging									
130	QC4- 100% Inspect kits for completeness	0.00							
130									
QC	Memo	0.00							
Quality Control									

DAS
27
9-89

APR 27 2016

MCS 16-04-08

DAS
6
9-89

APR 08 2016

DAS
28
9-89DAS
27
9-89

APR 27 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐					
Misidentified ☐	Past Due ☐						

Work Order ID 143892

March 28, 2016 10:28:06 AM

143892

Page 2

Item ID: D412-711-021**Accept*****N900040100*****Setup Start *NS1*****Revision ID:****Stop *NS2*****Item Name:** Vertical Reference Door Modification LH**Start Date:** 4/11/2016 **Start Qty:** 1.00 ***1*****Cust Item ID:****Required Date:** 4/18/2016 **Req'd Qty:** 1.00 ***1*****Customer:****Reference:****Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____**Run Start *NR1*****QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____**Stop *NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150		0.00							
150						DAS			
Packaging	Memo	0.00				27			
Packaging	Identify and pack for shipping as per PPP D412-711-021					9-89			
	Location: _____								
	PPP rev: _____								
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.00							
Quality Control									

APR 27 2016

APR 27 2016

MCS

Lm 11/04/27

MCS APR 27 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

March 28, 2016 10:28:11 AM

Page 1

Work Order ID: 143892

143892

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 4/11/2016

Required Date: 4/18/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 11.04.07 new issue DD verf:EC
14.04.25 ECN14-548 DD verf:JLM

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4324-011 *D4324-011* Armrest Assembly		Manufactured	No				Each	0.0000		1			DAS 28 9-89
D412-761-043-09 *D412-761-043* Modified Latch Mechanism, LH		Manufactured	No			120	Each	3.0000	1	1			DAS 28 9-89
				<u>Location</u>			<u>Loc Qty</u>			<u>Loc Code</u>			
				FG020			3						
				142246			3						DAS 6 9-89
D412-711-101 *D412-711-101* Replacement Vertical Reference Window		Manufactured	No			120	Each	0.0000	1	1			DAS 28 9-89
D3802-1-120 *D3802-1-120* Window Seal - 120"		Manufactured	No			120	Each	2.0000	1	1			DAS 28 9-89
				<u>Location</u>			<u>Loc Qty</u>			<u>Loc Code</u>			
				ST639			2						DAS 6 9-89
				141730			2						APR 08 2016
D4165-1 *D4165-1* Doubler		Manufactured	No			120	Each	1.0000	1	1			DAS 28 9-89
				<u>Location</u>			<u>Loc Qty</u>			<u>Loc Code</u>			
				ST236			1						DAS 28 9-89
				137259			1						APR 08 2016

DQA: _____ Date: _____



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Picklist Print

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143892

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 4/11/2016

Required Date: 4/18/2016

Start Qty: 1.00

Required Qty: 1.00

D4165-11 Manufactured No

120 Each

10.0000

1 1

D4165-11

Door Cover Panel

**

DAS
6
9-89
28
9-89

Location

Loc Qty

Loc Code

st238

10

141938

10

D4207-1 Manufactured No

120 Each

10.0000

1 1

D4207-1

Window Retainer

**

Location

Loc Qty

Loc Code

ST237

10

141942

10

D4207-3 Manufactured No

120 Each

6.0000

1 1

D4207-3

Instrument Window

**

Location

Loc Qty

Loc Code

ST237

6

142232

6

D4269-1 Manufactured No

120 Each

1.0000

1 1

D4269-1

Angle

**

Location

Loc Qty

Loc Code

ST089

1

137127

1

D4269-3 Manufactured No

120 Each

10.0000

1 1

D4269-3

Angle

**

Location

Loc Qty

Loc Code

ST089

10

141939

10

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Shop Packet Print

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APR 08 2016

144018

APR 08 2016

DQA: _____ Date: _____

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Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Work Order ID: 143892

143892

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 4/11/2016

Required Date: 4/18/2016

Start Qty: 1.00

Required Qty: 1.00

D4269-5

Manufactured No

120

Each

1.0000

1 1

D4269-5

Angle

DAS
27
9-89

Location

Loc Qty

Loc Code

ST237

1

134700

1

D4269-7

Manufactured No

120

Each

4.0000

1 1

D4269-7

Angle

DAS
27
9-89

Location

Loc Qty

Loc Code

ST237

4

132994

4

D4327-1

Manufactured No

120

Each

10.0000

1 1

D4327-1

Angle

DAS
27
9-89

Location

Loc Qty

Loc Code

ST237

10

141940

10

D4327-3

Manufactured No

120

Each

10.0000

1 1

D4327-3

Angle

DAS
27
9-89

Location

Loc Qty

Loc Code

ST237

10

141943

10

D4385-1

Manufactured No

120

Each

5.0000

2 2

D4385-1

Placard

DAS
27
9-89

Location

Loc Qty

Loc Code

ST095

5

136305

5

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																								
Description Work Order Deviation				Disposition				Completed By																																																							
								Lead hand / Supervisor Approval Verification																																																							
								QC / QA Coordinator Approval																																																							
Root Cause		FAULT CATEGORY																																																													
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____	
Misidentified ☐	Past Due ☐																																																														

Picklist Print

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Work Order ID: 143892

143892

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 4/11/2016

Required Date: 4/18/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-3A Purchased No 120 Each 300.0000 22 22

AN3-3A

Bolt

**

DAS
6
28
9-89

Location Loc Qty Loc Code

ST350 300
m134294 200
m134376 100

22

DAS
27
9-89

AN3-4A Purchased No 120 Each 406.0000 20 20

AN3-4A

Bolt

**

Location Loc Qty Loc Code

over003 300
m134502 300
ST350 106
m133990 106

20

DAS
27
9-89

AN3-6A Purchased No 120 Each 273.0000 26 26

AN3-6A

Bolt

**

Location Loc Qty Loc Code

over003 175
M134055 175
ST349 98
M133932 98

26

DAS
27
9-89

DAS
28
9-89

APR 08 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐					
Misidentified ☐	Past Due ☐						

Picklist Print

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Work Order ID: 143892

143892

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 4/11/2016

Required Date: 4/18/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-12A Purchased No

120 Each 131.0000 1 1

AN3-12A

Bolt

DAS
6
9-89
DAS
28
9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
GA	2	
m129682	2	
over003	100	
m134257	100	
ST349	29	
m133064	16	
m133234	13	

NAS1149F0332P Purchased No

120 Each 2,467.000 92 92

NAS1149F0332P

Washer

DAS
6
9-89
DAS
28
9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
GA	354	
m133709	354	
ST262	2113	
m134134	613	
m134257	1500	

CR3242-4-2 Purchased No

120 Each 113.0000 34 34

CR3242-4-2

RIVET

DAS
28
9-89
DAS
6
9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
ST317	13	
m133077	13	
ST318	100	
m134376	100	

34

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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March 28, 2016 10:28:11 AM

Work Order ID: 143892

143892

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 4/11/2016

Required Date: 4/18/2016

Start Qty: 1.00

Required Qty: 1.00

MS20426AD3-3

Purchased

No

120

Each

3,718.000

135

135

MS20426AD3-3

RIVET

Location

Loc Qty

Loc Code

GA

1314

M131624

1314

ST312

2404

M131624

2404

DAS
27
9-89

MS20426AD4-3

Purchased

No

120

Each

2,411.000

140

140

MS20426AD4-3

Rivet

Location

Loc Qty

Loc Code

GA

1171

113064

171

m125807

1000

ST312

1240

m125807

1240

DAS
27
9-89

MS20470AD3-3

Purchased

No

120

Each

6,397.000

25

25

MS20470AD3-3

RIVET, UNIVERSAL HEAD

Location

Loc Qty

Loc Code

GA

877

1065

877

ST310

5520

16941

5520

DAS
27
9-89

DAS
6
28
9-89

DAS
6
28
9-89

DAS
28
9-89

APR 08 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																							
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																							
Root Cause		FAULT CATEGORY																																																													
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____	
Misidentified ☐	Past Due ☐																																																														

Picklist Print

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March 28, 2016 10:28:11 AM

Work Order ID: 143892

143892

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 4/11/2016

Required Date: 4/18/2016

Start Qty: 1.00

Required Qty: 1.00

MS20470AD4-3

Purchased

No

120

Each

1,155.000

90

90

MS20470AD4-3

Rivet - Universal Head

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

768

2193

768

ST310

387

2193

387

90

MS21042L3

Purchased

No

120

Each

2,371.000

24

24

MS21042L3

Nut

DAS
27
9-89

Location

Loc Qty

Loc Code

FP001

100

m133790

100

GA

828

m133790

28

m134360

800

OVER007

1200

m134360

1200

Return2016

1

M132382

1

ST304

242

m134039

242

24

DAS
28
9-89

APR 08 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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March 28, 2016 10:28:12 AM

Work Order ID: 143892

143892

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 4/11/2016

Required Date: 4/18/2016

Start Qty: 1.00

Required Qty: 1.00

MS21059L3

Purchased

No

120

Each

139.0000

4

4

MS21059L3

Nut Plate

**

DAS

6

9-89

Location

Loc Qty

Loc Code

CA

8

M129682

8

GA

30

M133990

30

ST301

75

M134055

25

M134257

50

ST303

26

M133016

26

DAS

28

9-89

MS21069L3

Purchased

No

120

Each

85.0000

34

34

MS21069L3

ANCHOR NUT

**

DAS

6

9-89

Location

Loc Qty

Loc Code

ST299

85

m133990

5

m134370

80

DAS

20

9-89

DAS

27

9-89

MS21069L08

Purchased

No

120

Each

598.0000

8

8

MS21069L08

ANCHOR NUT

**

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

ST299

598

123522

598

DAS

27

9-89

APR 08 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
☐ OTHER : _____									

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Work Order ID: 143892

143892

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 4/11/2016

Required Date: 4/18/2016

Start Qty: 1.00

Required Qty: 1.00

MS21071L3

Purchased

No

120

Each

204.0000

3

3

MS21071L3

ANCHOR NUT

DAS
27
9-89

Location

Loc Qty

Loc Code

ST299

104

m129702

104

ST301

100

125654

100

**

DAS
6
9-89

DAS
28
9-89

MS21071L08

Purchased

No

120

Each

160.0000

1

1

MS21071L08

ANCHOR NUT

DAS
27
9-89

Location

Loc Qty

Loc Code

ST299

160

102587

60

103447

100

**

DAS DAS
6 28
9-89 9-89

APR 08 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

QTY -011	QTY -013	QTY -015	QTY -017	QTY -019	QTY -021	QTY -041	PART NUMBER	DESCRIPTION
					22	22	AN3-3A	BOLT
					20	20	AN3-4A	BOLT
					26	26	AN3-6A	BOLT
					1	1	AN3-12A	BOLT
					92	92	NAS1149F0332P	WASHER (OR AN960-10L)
					34	34	CR3242-4-2	RIVET
					135	135	MS20426AD3-3	RIVET
					140	140	MS20426AD4-3	RIVET
					25	25	MS20470AD3-3	RIVET
					90	90	MS20470AD4-3	RIVET
					24	24	MS21042L3	NUT
					4	4	MS21059L3	NUT PLATE
					34	34	MS21069L3	NUT PLATE
					8	8	MS21069L08	NUT PLATE
					3	3	MS21071L3	NUT PLATE
					1	1	MS21071L08	NUT PLATE
						1	204-030-853-125	LH COPILOT DOOR (204-030-853-137/-155)
1							D412-711-111	WIRING HARNESS, 212/412
^B 1							^B D4268-043	INSTRUMENT PANEL, 212/412 (REPLACES EA20469-15-412)
	1						D205-711-113	WIRING HARNESS, 205
	^B 1						^B D4268-041	INSTRUMENT PANEL, 205 (REPLACES EA20469-15-205)
		1					D204-711-115	WIRING HARNESS, 204
		^B 1					^B EA20469-15-204	INSTRUMENT PANEL, 204
			1				D214-711-117	WIRING HARNESS, 214
			^B 1				^B EA20469-15-214	INSTRUMENT PANEL, 214
				1			D212-711-119	WIRING HARNESS, EAGLE SINGLE
				^B 1			^B D4268-047	INSTRUMENT PANEL, EAGLE SINGLE

(A) IF CUSTOMER PREFERS TO SUPPLY AND MODIFY THEIR OWN DOOR, D412-711-021 SHOULD BE SUPPLIED IN LIEU OF D412-711-041.
 (B) INSTRUMENT PANEL INCLUDED WITH HARNESS ABOVE

NOTES

1) WIRING HARNESSES:

For Bell 204/205/210/214 Wiring Harnesses, use drawing D2046904.

For Bell 212 Wiring Harnesses, use drawing D2046903*.

For Bell 412 Wiring Harnesses, use drawing D412-711-901.

For Bell 212 modified per SH07-28/SR02831NY use D212-761-224 or D212-761-225 depending on aircraft s/n.

* Despite the note on the drawing, D2046903 is applicable to all 212 aircraft serial numbers

Wiring Harnesses will vary depending on aircraft s/n.

2) D412-711-101 REPLACEMENT WINDOW:

To increase downward viewing clarity, it is acceptable to cut a small section from the replacement window on its downward side per Figure 1 of this document. The cutout can be a maximum of 9.00" wide x 17.00" long (229mm x 432mm), measured along the profile of the replacement window. The corners of the cutout must have a minimum radius of 2" (50mm). The cutout should be located at least 1.0" (25mm) from the flange. The actual shape of the cutout can vary as desired, as long as the overall dimensions are within the specified limits. See Figure 1 for reference.

3) D412-711-043 SNAP VENT KIT:

It is acceptable to install a total of up to 2X D3932-1 Snap Vents (available from Dart) onto the D412-711-101 Replacement Window to provide ventilation into the cabin. Refer to Figure 1 for acceptable locations and size of cutouts.

4) It is acceptable to use MS21042L3 nuts to install the window in lieu of anchor nuts shown on D2046901.

APPROVED

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	DC	DRAWING NO.	REV. K
MFG. APPR.	JLM	D412-711	SHEET 3 OF 6
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	VERTICAL REFERENCE DOOR	NTS
DATE	14.04.07	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

9-89

QTY -011	QTY -013	QTY -015	QTY -017	QTY -019	QTY -021	QTY -041	QTY -043	PART NUMBER	DESCRIPTION
X								D412-711-011	VERTICAL REFERENCE DOOR INSTALLATION, 212/412
	X							D205-711-013	VERTICAL REFERENCE DOOR INSTALLATION, 205/210
		X						D204-711-015	VERTICAL REFERENCE DOOR INSTALLATION, 204
			X					D214-711-017	VERTICAL REFERENCE DOOR INSTALLATION, 214
				X				D212-711-019	VERTICAL REFERENCE DOOR EAGLE SINGLE
					X			D412-711-021	VERTICAL REFERENCE DOOR KIT
A1	A1	A1	A1	A1		X		D412-711-041	VERTICAL REFERENCE DOOR ASSEMBLY
							X	D412-711-043	SNAP VENT KIT
					1	1		D412-761-043	MODIFIED LATCH MECHANISM KIT, LH (REPLACES EA20469-23/-24/-25)
					1	1		D412-711-101	REPLACEMENT WINDOW (REPLACES EAGLE P/N EB212-100L / EA20469-3)
					1	1		D3802-1-120	RUBBER STRIP
							2	D3932-1	SNAP VENT
					1	1		D4165-1	DOUBLER
					1	1		D4165-3	DOOR INNER SKIN (REPLACES EA20469-18)
					1	1		* D4165-5	AFT RIB (REPLACES EA20469-34)
					1	1		** D4165-7	FWD RIB (REPLACES EA20469-31)
					1	1		D4165-9	ANGLE (REPLACES EA20469-17)
					1	1		D4165-11	DOOR COVER PANEL (REPLACES EA20469-21)
					1	1		D4207-1	WINDOW RETAINER (REPLACES EA20469 -14)
					1	1		D4207-3	WINDOW (REPLACES EA20469-13)
					1	1		* D4269-1	ANGLE (REPLACES EA20469-33)
					1	1		** D4269-3	ANGLE (REPLACES EA20469-30)
					1	1		** D4269-5	ANGLE (REPLACES EA20469-29)
					1	1		* D4269-7	ANGLE (REPLACES EA20469-32)
					1	1		D4324-011	ARM REST ASSEMBLY (REPLACES EA20469-16)
					1	1		D4327-1	ANGLE (REPLACES EA20469-11)
					1	1		D4327-3	ANGLE (REPLACES EA20469-07)
					2	2		D4385-1	PLACARD

* PART OF EA20469-10 REAR RIB ASSEMBLY
** PART OF EA20469-12 FWD RIB ASSEMBLY

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DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	DC	DRAWING NO.	REV. K
MFG. APPR.	JLM	D412-711	SHEET 2 OF 6
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	VERTICAL REFERENCE DOOR NTS	
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